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# Symbol and Function in Contemporary Architecture for Museums

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## Symbol and function in contemporary architecture for museums\*

### I

As Robert Venturi has noted in his intriguing analysis of contemporary architecture, *Complexity and Contradiction in Architecture*, architecture today is necessarily "complex and contradictory" in its search for meaningful forms necessary to address the changing needs of a dynamic society.<sup>1</sup> Nowhere is this issue more notable than in contemporary museum architecture. As architects turn away from the pure forms of modernism as developed by Le Corbusier, Mies van der Rohe, and Louis Kahn, they are increasingly challenged to find innovative ways to effectively address the changing needs of art museums. In the course of inventing new forms, they have also risked placing major emphasis on aesthetics at the expense of function. The focus here will be on the tension in certain contemporary museum structures between architecture's symbolic role and its function as a space to house and present art. 'Symbolic' is used here in two different senses. It refers to a building as an aesthetic or sculptural form and secondly to its role in referring to, or expressing civic identity and other non-museum concerns. 'Function' refers to the intended purpose or practical use apart from its role as a work of architectural art. The concern of our essay becomes apparent as architects place greater emphasis upon symbolism at the expense of function, and their buildings increasingly look like massive sculptures rather than suitable structures for carrying out the work of the museum.

Frank Gehry's 1997 Guggenheim Museum in Bilbao, Spain and the more recent Milwaukee Art Museum building of Santiago Calatrava which opened in the U.S.A. in 2002, are representative of this trend. Both have received worldwide attention for their original designs, and both have been widely criticized for allowing the architectural form to dominate or detract from other museum functions. The Bilbao project was conceived as the centerpiece of a massive effort to revitalize a city in serious decline. The aim was to create architecture that would become a tourist destination, serve as a catalyst to revitalize the city of Bilbao, and also house a branch of the Guggenheim museum. Gehry's bold design produced a massive sculptural building that accomplished in some degree all of these purposes. The building is widely re-

garded for its impact on revitalizing the city of Bilbao. In Milwaukee, Calatrava produced an innovative design that, when successfully marketed, drew media attention throughout the world. Here too the aim was to produce a building that would become an important symbol to enhance the city's identity and also expand the capacity of the museum. In both instances the architecture has become the main focus, leaving the art and other museum activities in a subordinate role. In Milwaukee, cost overruns and massive residual debt necessary to mount the building placed severe stress on the museum's resources for operations and programs.

In order to place in context and to assess the import of these developments, it is useful to consider in greater detail the functions of an art museum. Running throughout the history of modern museums and their predecessors is an emphasis upon gathering and caring for the cumulative output of artists in all cultures and providing education for their users.<sup>2</sup> As far back as ancient Greece, the notion of an art museum and its collections existed as a source of inspiration and cultural knowledge. In the second century A. D. the Greek author Pausanias reported that a building adjacent to the Propylae on the Acropolis at Athens contained a hall called the Pinakothekē where art could be displayed by the public.<sup>3</sup> This gallery was one small part of a grand scheme of public art envisioned by Pericles in the Athenian democracy of Fifth Century B. C. The initiation of private art collections by the princes and noblemen of Renaissance Europe and beyond was a further step toward the modern museum, but the collections were accessible mainly to the nobility, members of the court, distinguished visitors from abroad, and those training to be artists. These collections functioned as a source of knowledge and also as symbols of status and wealth. In 1793, the Louvre was established in Paris with three main objectives: to establish state control over the arts, to show the artistic supremacy of France in the international community, and to commission artists to create art that would educate the public. After the French Revolution, the Louvre became the first national public art museum giving all persons access to the collections. In the Soviet Union, the art museum be-

came a utilitarian tool for ideological purposes with an agenda of socialist realist art. During the second half of the Twentieth century, art museums defined their purposes under the influences of professional museum associations: to collect, preserve, and interpret works of art.

Today, the functions of the art museum are undergoing radical change. At the center of the change is a shift from collections to "providing a variety of primarily educational services to the public."<sup>4</sup> The outcome is a judgment that the primary responsibility of museums is education of its users, and not to the collections as it had been thought by the museum profession in the recent past. As a result, art museums have become "more open, dynamic, and participative, becoming both catalysts and disseminators for the newest cutting edge art."<sup>5</sup> In addition to the traditional forms of painting, sculpture, and drawing, the museums are expected to accommodate video, digital projects, photography, film, architecture, design, and theater all of which calls for different uses of space and ways of presenting art. In its new role, as Francisca Hernández Hernández has noted, the museum becomes a cultural mediator between the art works and the public. This new situation calls for diversity in collections and exhibitions and program activities, as well as flexibility in the architecture intended to house these activities.

Given these changes in the functions of museums, what are the implications for contemporary architecture practice? Particularly, how does the recent tendency toward exotic sculptural museum buildings fit into the changing needs of the museum? At first glance, it would appear that the new museum architecture as manifest in Bilbao, Milwaukee, and in a burgeoning expansion of new museums across the world, has little to do with the redefinition of museums as places dedicated primarily to education. Rather than serve educational purposes, such architecture mainly serves as an expression of the architect's aesthetic vision; it offers monumental sculptural symbols of civic identity and perhaps economic prosperity. The result, it seems, is an increasingly sharp division between the educational purposes of the museum and the practice of museum architecture. In the most extreme cases, the buildings become the main art attraction, and the emphasis shifts from the art and related activities inside to the architecture itself. On the other hand, the new museum architecture has increased media exposure and public awareness of museums, which may well affect greater participation in the educational purposes of museums.

This trend in contemporary museum architecture represents a substantial departure from the main stream abstract Modernist architecture featuring austere geometric

box-like structures reduced to linear elements consisting of walls, beams and columns and without natural light. It is perhaps an over reaction to a perceived need to enliven the austere spaces of Modernist museum buildings. Or perhaps it is an attempt to recapture the glory of past architecture of the Classical or Medieval times when magnificent original architecture was created to serve religious and political needs. Some would say that museums have become the contemporary equivalent of cathedrals and civic architecture of the past.

Before examining museum architecture in a broader philosophical context, it is useful to consider very briefly how architecture and sculpture have functioned in relationship to each other in the past. Historically, the two art forms have been understood to refer to distinct, though related art practices. In the past, sculpture functioned as an integral part of architecture without sacrificing the integrity of either. For example, the friezes of the Parthenon and the carvings of a medieval cathedral partnered without compromising each other.<sup>6</sup> With respect to current architectural practice, the lines between sculpture and architecture have become increasingly blurred. Today sculptors such as Ilya Kabakov and others produce works that resemble building forms in their appearance, but we are not likely to mistake their constructions for dwellings or other functional buildings.

The situation is different with museum architecture that looks like sculpture, but is expected to house collections and exhibitions and other educational functions of the museum. What is new with contemporary museum architecture is the emphasis on the building itself as sculpture. The role of sculpture has shifted from a subordinate feature of architecture to its dominant feature. Some might say that the architecture has replaced other art forms shown inside the museum as the principal art form connected to the museum. This development may call for a major rethinking of the classification of the arts with respect to the traditional categories where architecture and sculpture are differentiated and architecture's function separates it from the other arts.

## II

In order to see these problems from a broader theoretical perspective, I turn now to the writings of the philosopher-theorists G.W.F. Hegel, Rudolph Arnheim, and Nelson Goodman all of whom have written important texts on architecture. A brief examination of these writings will provide a background for further reflection on the current problems with museum architecture.

## Hegel and Architecture

According to Hegel, architecture represents the beginning of art itself. Architecture is most closely associated with the symbolic stage of art, the first of Hegel's three divisions (symbolic, classical, and romantic) in the progressive development of art as determined by how content and form are related. In architecture's symbolic state, the natural materials of art which comprise its form (wood and stone) dominate the idea or spiritual content. As Hegel represents it, the material element of architecture consisting of heavy matter is essentially non-spiritual, and is shaped according to the laws of gravity. Its immediate function is to selectively alter the physical world of nature in order to satisfy specific human needs of daily life including shelter. Additionally architecture creates spaces for community gatherings for religious, political, and other community purposes, and is one of the symbolic means for disclosure of absolute spirit.<sup>7</sup> In its functional role, Hegel stipulates that the criteria for good architecture must include providing shelter and fulfillment of other civic needs.<sup>8</sup> Particularly with respect to secular architecture, Hegel is adamant that utility is the main determinant of architectural structure. A successful building must also fit the climate and the environment of the natural landscape.

Beyond its practical functions, architecture has a symbolic role on Hegel's view. At this point, architecture borders on sculpture as their respective symbolic functions begin to overlap. Yet he insists that the two differ in important respects. Sculpture, by focusing on the inner subjective life, leaves behind the raw organic materials of nature which are most closely linked to architecture. Its content is spirit or mind expressed typically in a form modeled after the human body. Sculpture is emancipated from serving external purposes or practical functions such as providing shelter or an environment for religious or civic activities. Rather, according to Hegel, sculpture exists for its own sake and is free to provide for inner spirit a corporeal shape appropriate to the nature of spirit itself.<sup>9</sup> Architecture's symbolic forms are initially drawn from organic nature where its meanings are linked to references to external forms found in nature. In contrast to sculpture, architecture in its symbolic role mainly expresses its own material features, or corresponding features of its external environment, and ideas relating to the same. It can only point obliquely to inner subjective spirit. Yet, as architecture develops into more advanced states, it relies increasingly on the inventiveness of the human intellect and may express universal ideas and sti-

mulate thought in the minds of those who contemplate its forms.<sup>10</sup> At this point, Hegel allows that a building too may carry its own meaning in itself and reveal ideas worthy of contemplation independent of a practical function corresponding to a particular external need.

Thus, while architecture and sculpture are perceived by Hegel as two distinct art forms arranged in a hierarchical mode with respect to their capabilities for presenting spirit, where sculpture occupies the favored position, there exists already a tension between the two arts. Despite Hegel's insistence that sculpture holds a higher place in his hierarchical system of the arts, sculpture is often seen as subordinate to the architecture located in the same environment. Apart from the obvious examples where sculpture serves as ornament delineated by pedestals or other markers to augment the beauty of architecture, there are numerous examples in the history of art such as the Classical temples and Medieval churches as well as the gardens and gates of civic spaces where the lines between sculpture and architecture are blurred.<sup>11</sup>

More important, Hegel set the stage for the debate over symbolic and functional aspects of contemporary museum buildings, which is our concern here. Is it possible to gain some perspective on the current problem of museum architecture by abstracting from his analysis? He affirms the two main functions of architecture: to serve human practical needs and to function as cultural symbols. For Hegel, the main priority of architecture is, ostensibly, to create a building for a practical use. Conceptual confusion and practical waste may follow when this priority is ignored. Yet this initial dictum is challenged by the temptation afforded architects to exploit architecture's symbolic potential at the expense of the practical and take it in the direction of sculpture. Is this not the very issue with architects such as Gehry and Calatrava and others who appear bent on producing massive sculptural buildings that insist on dominating the art and the museum functions they are intended serve?

## Arnheim on Architecture

Writing in the 1970s, Rudolf Arnheim considers architecture the most important of the arts. He examines architecture from the perspective of its visual form, primarily with respect to its psychological effects on those who experience it. Like Hegel before him, he considers both the symbolic and the functional aspects of architecture. Arnheim is particularly interested in the visual symbolism of architecture. He holds the view that "...in a well-designed building there is a structural correspondence



between visual properties and functional characteristics."<sup>12</sup> Hence visually adequate buildings indicate successfully functioning ones.

Architecture's most important symbolism derives from the dynamic expressive features of its form as interpreted by means of human perceptual experiences, rather than from any literal conventional references. Effective symbolism in architecture is rooted in the strongest and most universal experiences. Among these are religious beliefs and philosophical ideas, but also the perceptual dynamics of spontaneous symbolism deriving from daily experiences. As a test of architecture's effectiveness Arnheim raises these questions: "Does a building display the visual unity that makes it understandable to the human eye? Does its appearance reflect the various functions, physical as well as psychological, for which it was designed? Does it display something of the spirit that animates, or ought to animate, the community? Does it transmit some of the best in human intelligence and imagination?"<sup>13</sup>

Architecture and sculpture, each with its own particular role in the human environment, complement each other as distinct types of expressive symbolism. At the most basic levels, each expresses its own likeness by revealing structural features, as well as by indicating its function. One important difference noted by Arnheim is that sculpture is mainly independent of its context and can be moved. There are exceptions, for example, when a sculpture is part of architecture, is site specific, or too large in scale to move. Normally buildings are too large in scale and too complex to move. Because sculpture is mainly independent of non-symbolic functions and might be called upon to serve in a variety of contexts, Arnheim argues, it is expected to present "a valid image of human existence as a whole."<sup>14</sup> On the other hand, architecture is expected to create buildings capable of making a broad visual statement, but the expectations for architectural statements are constrained by the limitations of site and the practical function of the building. A building's significance is enhanced when it fits harmoniously onto the site and connects to the surrounding environment.

Arnheim recognizes the importance of harmonious relationships between the visual symbolic features of effective architecture and its functional characteristics. At the same time, he clearly understands the difficulties that may arise when architecture attempts to masquerade as sculpture. This point is made clear in a humorous drawing by Robert Sowers which shows a giant Henry Moore-like sculpture poised unceremoniously on top of a row of arches, dwarfing the overall architectural complex.<sup>15</sup> Even so, the relation between architecture and sculpture re-

mains somewhat fluid. In support of this point, Arnheim cites the exhaust tower of Le Corbusier's *Unité d'habitation* in Marseille as an example of a construction that can be seen at once as a complete work of sculpture, or as a functional element of the architecture for channeling the flow of air.<sup>16</sup> Depending on whether it acts as a symbol or as a functioning part of a building, as Arnheim has shown, the identical construction may be seen as sculpture on one occasion and as architecture on another.

This discussion of architecture and sculpture brings us back to the problem of symbolism versus function in contemporary museum architecture. It is important to note that, contrary to Hegel's view, Arnheim ranks architecture as the most important art in the hierarchy of the arts, ahead of sculpture. Yet he does not force us to choose between the symbolic or sculptural and the practical in architecture. Architecture works best when a structural correspondence exists between its expressive symbolic features and the execution of its practical purposes. To the extent that expressive symbolic sculptural features take precedence over function, or vice versa, the outcome is architecture that fails in some degree to achieve its purposes. Given his analysis of architecture's symbolic and functional aspects, Arnheim, too, would likely find problematic the current museum buildings where symbolic sculptural features appear to take precedence over function. His reasons are different from Hegel's who would criticize the contemporary museum architects for failure to give proper attention to the practical aspects of their buildings.

Nelson Goodman's writings on aesthetics in his book *Languages of Art* published in 1978, and his subsequent publications on aesthetics have had a significant impact on how we think about symbols in the arts.<sup>17</sup> His views on architecture are developed most fully in an essay called "How Buildings Mean."<sup>18</sup> Goodman takes note of the tension existing in architecture between aesthetics or symbolism and practical function as do Hegel and Arnheim. "The relationship between these two functions ranges from interdependence to mutual reinforcement to outright contention, and can be highly complex."<sup>19</sup> From the beginning, it is clear that Goodman's main interest in architecture is aesthetic symbolism over its other practical functions, although he recognizes that a building may have a wide range of meanings apart from aesthetic symbols. Goodman narrows the type of symbolism appropriate for aesthetic symbolism, by grouping the varieties of reference under four headings: denotation, exemplification, expression, and mediated reference. He uses these categories of symbolization to differentiate among the arts and, for our purposes, to pinpoint the particular features of architecture.

Aesthetic symbolism is what characterizes architecture as a form of art. Cutting directly to the main point, Goodman states the conditions for architecture in these terms: "A building is a work of art only insofar as it signifies, means, refers, symbolizes in some way."<sup>20</sup> Architecture is not typically descriptive or representational, although its sculptural parts may be representational. However, a building may exemplify properties of its own structure that it literally possesses such as pillars, beams, proportions, weight, and volume, as well as the properties of steel, stone, and cement. Metaphorically, a building may express feelings and ideas that it does not literally possess. In both exemplification and expression, the symbolism runs from the symbol to various labels that apply to it.<sup>21</sup>

For Goodman, the main questions concerning architecture are these: "When is a building a work of art? And, 'What form of symbolism best characterizes the symbolic features of architecture?' Or, what symbolic features of architecture best enable us to differentiate between it and the symbols operating in the other arts, and other forms of understanding?" The answers to these questions are complex as a building may exemplify properties that do not contribute to its standing as a work of art, alongside those that do determine its connections to art. For example, important properties associated with a building may come from its association with a historical event, or from its designated use. He cautions against confusing the question, "What is art?" with the question, "What is good art?" He also dismisses the relevance of artist's intentions in favor of the symbolic features of the object as a basis for determining when art occurs.

Goodman, alongside Hegel and Arnheim, distinguishes between architecture and sculpture; he bases the differences on their respective symbolic properties. Both architecture and sculpture are based on a creative process of inventing and applying symbols, which happen to fall into different classifications. The role of the sculptor is to undertake a subtle translation of the subject based on its orientation, distance and lighting as well as the artist's knowledge, training, habits, and concerns.<sup>22</sup> Sculpture is perhaps more closely aligned with representation where the references run from the labels to the symbols. But sculpture is no more imitating nature, or what already exists, than is architecture. Architecture's symbolism more likely takes the form of exemplification or expression rather than representation. The exceptions arise when a sculptural part of a building, as in a Byzantine church with its interiors filled with mosaics, provides representational symbolism.<sup>23</sup>

But the question of overloading architecture with symbolic or sculptural features is a moot point for Goodman's theory because he has already conceded that the greater si-

gnificance of architecture lies in its symbolic features as a work of art. Could it be that the current practice of loading museum architecture with aesthetic features emphasizing sculptural over the practical finds support on Goodman's view of architecture? It is clear that his main concern centers on the architectural work as art, even when he acknowledges that architecture usually has a practical function. Any practical function that architecture might have apart from its symbolic role as art is of lesser importance. Or so it appears. Nevertheless, he acknowledges that interpretation and judgment of a building's worth requires that the building be seen from an assortment of viewpoints.<sup>24</sup> Among these must be an assessment of a building's success in fulfilling its intended use. The meanings assigned to a building depend on its overall effectiveness or fit. There are no general rules to base our judgments of the effectiveness or fit of a work of architecture apart from the extent to which a work "enters into the way we see, feel, perceive, conceive, [or] comprehend in general."<sup>25</sup> Excellence in architecture depends on the extent that a building informs and reorganizes experiences, or offers insight and understanding. "Excellence of a work is a matter of enlightenment."<sup>26</sup>

Apart from the building itself, Goodman has much to say about the mission of a museum. Succinctly put, the mission of a museum is education rather than recreation. Its task is to make the works it contains work as a means for the visitors to learn to see and understand the art works, and through them to better see, understand, and construct their worlds. The patterns, feelings, and ideas found in works of art inform and direct our ways of feeling and thought "by stimulating inquisitive looking, sharpening perception, raising visual intelligence..."<sup>27</sup> Understood in this context, the museum's primary concern is the interrelationship between art and ideas. Hence it is essential from his perspective that the architecture of a building participate along with the other works of art associated with a museum in realizing the museum's educational aims. In this respect, Goodman may well find greater sympathy with the architecture of our time in its emphasis on the symbolic. By focusing on the educational mission of a museum, he shows the possibility of creating harmony between the symbolic/sculptural aspects of museum architecture and its inner workings.

### III

Our review of a sampling of theoretical writings on architecture suggests that the problems found in contemporary museum architecture have their roots in the past. Since Hegel's time and before, theorists have identified

in their analysis of architecture the two fold nature of architecture. As an art form, it serves important symbolic purposes; its practical purposes are linked to serving individual and community functions requiring the delineation of space. The relation of sculpture and architecture is complicated by the fact that they often work together in the same spaces. Sculpture's close association with architecture in the past has sometimes raised doubts about its independence from architecture. In the present context of museum architecture, where the sculptural features of a building appear to dominate the functional, the relationship has shifted. The result is that certain museum buildings are more likely to be seen as a sculptural object than as functioning buildings. It is increasingly easy to think that architecture relies on sculpture for its main features, rather than the reverse.

The trend in the past decade has been a proliferation of museum architecture where the symbolic or sculptural aspects of the buildings, whether in the service of design aesthetics or external civic needs such as economic revival or civic pride, have become dominant. This trend is not over as architects in many cities across the world strive for innovative new building forms, often at enormous costs. The reasons for this development derive in part from unresolved issues pertaining to the respective roles of symbolic and practical function as is seen in the analysis of architecture provided by Hegel, Arnheim and Goodman. Another reason may be found within the ideals and the vocabulary of the modern architectural tradition itself. This tradition advanced form over function and sought to generate ideal forms that derived more from the

world visions of the architects than from any intent to satisfy practical functions.<sup>28</sup> The vocabularies of architects such as Gehry and Calatrava do not follow the abstract geometrical patterns of Le Corbusier or Louis Kahn who envisioned a universal vocabulary of architectural forms derived from industrial technical forms that underscored Modernist conventions in architecture. Yet the works of Gehry and Calatrava are no more accommodating to a particular function or context, perhaps even less. Their architectural vocabularies are highly original invented forms do not necessarily arise from the features of a particular site. Indeed the same forms might appear in Barcelona, Liege, or Milwaukee. To the extent that sculptural ornament enters into the work of Gehry and Calatrava, it is the entire building structure that becomes the ornament. Like their modernist predecessors, these architects promote form over function and are equally abstract, but theirs is not the kind of abstraction based on geometry. It is more lyrical and expressive.

By looking at this issue in the contexts provided by the theoretical discussions of Hegel, Arnheim and Goodman, it is possible to see more clearly the importance of examining with a critical eye the relative place of symbolism and function in museum architecture, and to question whether current museum practice has gone astray in allowing the sculptural symbolism to become the dominant element. When either its symbolic or its practical aspects are out of balance the result is sure to be unsatisfactory architecture. If the past is a reliable guide, it works best when the symbolic (sculptural) and the practical in architecture are worked out in harmony with each other.

## Notes

\* This essay is dedicated to Professor Emeritus Dionysis A. Zivas, whose life long dedication to the aesthetic theory and practice of architecture and its constructive role in the significant life has produced an exemplary legacy. As a scholar he has established his place in the international community of aestheticians, and as an activist he has significantly contributed to the preservation and the advancement of architecture in his time.

<sup>1</sup> Robert Venturi, *Complexity and Contradiction in Architecture* (New York: The Museum of Modern Art, 1966, 67), pp. 16, 17.

<sup>2</sup> Curtis Carter, "Art Museum as a Purveyor of Culture," *Art, Life and Culture* (Seoul, Korea: Institute for Arts and Culture Research, Seoul National University, 2000), pp. 153-170.

<sup>3</sup> "Museums and Art Galleries," *Encyclopedia Britannica*, 1958, vol. 15, p. 994.

<sup>4</sup> Stephen E. Weil, "From Being About Something to Being for Somebody: The Ongoing transformation of the American Museum," *Daedalus: Journal of the American Academy of Arts and Sciences*, Summer, vol. 128, no. 3, Summer, 1999: 229.

<sup>5</sup> Francisca Hernández Hernández, "Reflections on Contemporary Art Museums and Centers," *Arco: Contemporary Art*, No. 33, autumn, 2004: 27. Not all museum professionals would agree with the current emphasis on change in Museums. James Cuno, Director of the Chicago Art Institute, takes an essentialist view and argues that the distinctive feature of museums is their dedication to "collecting works of art, preserving them for all of time, and making them available to visitors." See, James Cuno, "Why Art Museums are Essential," *Museum News*, July/August, 2004: 28, 29, 54, 55.

<sup>6</sup> John Dewey, *Art as Experience*, (New York: Capricorn Books, 1958) p. 222.

<sup>7</sup> G.W.F. Hegel, *Aesthetics: Lectures on Fine Art II*, translated by T. M. Knox (Oxford: Clarendon Press, 1975), p. 621-624.

<sup>8</sup> Hegel, p. 661, 698.

<sup>9</sup> Hegel, pp. 701, 702.

<sup>10</sup> Hegel, p. 636.

<sup>11</sup> Hegel, p. 702.

<sup>12</sup> Rudolf Arnheim, *the Dynamics of Architectural Form* (Berkeley, Los Angeles, London: University of California Press, 1977), p. 205.

<sup>13</sup> Arnheim), p. 1.

<sup>14</sup> Arnheim, p. 216.

<sup>15</sup> See figure 110. Drawing by Robert Sowers, Arnheim, p. 219 and Arnheim's comments on the drawing, p. 220.

<sup>16</sup> Arnheim, p. 218.

<sup>17</sup> Nelson Goodman, *Languages of Art* (Indianapolis: The Bobbs Merrill Company Inc., 1968).

<sup>18</sup> Nelson Goodman, "How Buildings Mean," in Nelson Goodman & Catherine Z. Elgin, *Reconceptions in Philosophy & Other Arts & Sciences* (Indianapolis/Cambridge: Hackett Publishing Co., 1988), pp. 31-48. Also published as Nelson Goodman, "Che cosa significa costruire, e quando e perché," *Domus*, No. 672, Maggio, 1986: 17-28.

<sup>19</sup> Goodman, "How Buildings Mean," p. 32.

<sup>20</sup> Ibid. p.33.

<sup>21</sup> Ibid. pp. 39-41.

<sup>22</sup> Curtis L. Carter, "Sculpture," in *The Routledge Companion to Aesthetics*, edited by Berys Gaut and Dominic McIver Lopes (London and New York: 2001), pp. 510, 511.

<sup>23</sup> Goodman, p. 34.

<sup>24</sup> Ibid. pp. 44, 45.

<sup>25</sup> Ibid.

<sup>26</sup> Ibid. p. 48.

<sup>27</sup> Nelson Goodman, *Of Mind and Other Matters* (Cambridge, Massachusetts and London, England: Harvard University Press, 1984), p.180.

<sup>28</sup> Robert Venturi, *Iconography and Electronics: Upon a Generic Architecture* (Cambridge, Massachusetts/London, England: MIT Press, 1996), p. 88.